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EDUCATION

saving the world begins at home

A PERSONAL GUIDE TO MANAGING HOUSEHOLD WASTE

ACKNOWLEDGEMENTS

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By making better decisions about what you buy and how you dispose of it, you can help protect our environment.

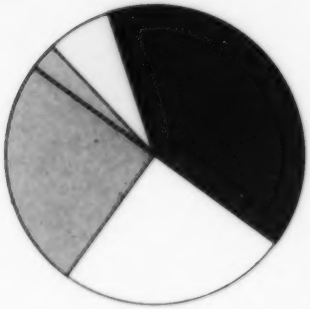
introduction

WASTE MATTERS

The trucks rumble down the lanes of our cities and towns, carrying away the week's garbage. The few bags set out don't appear to be much, but more than 2.4 million tonnes of solid waste goes to Alberta's municipal landfills every year. Municipalities are continuously challenged to make room for this tremendous amount of waste, some of it coming from commercial and construction activity, but much of it coming from our homes.

The amount of waste generated by humans has grown steadily in relation to our population and our economy. The postwar period of the 1950s saw a dramatic increase in economic activity in the industrialized world. Cheap plastics and aluminum revolutionized packaging and made possible a whole range of throwaway products and packaging. Since then, technology and growth have helped push the economy forward even further. With economic growth, consumption increases and everything consumed eventually becomes waste. What we do with that waste can make all the difference. Do we bury it and hope it "goes away", or do we get creative and put it to use?

Three million tonnes of solid waste would equal the weight of 300,000 garbage trucks.

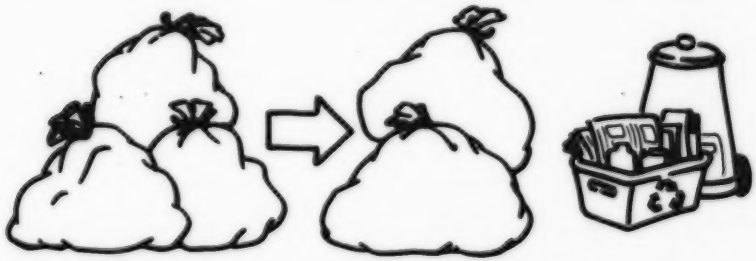


Average Residential Waste Composition (% by weight)

- Food & Yard Waste (35%)
- Paper (25%)
- Other Mixed (25%)
- Glass (3%)
- Plastics (7%)
- Metals (5%)

Leachate is the liquid that is produced when rain falls on a landfill, sinks into the wastes, and picks up chemicals as it seeps downward.

Landfills are difficult and costly to build and maintain. Few people want to have them close to where they live. Not only is pollution generated from transporting, treating and otherwise processing the waste we produce, there is the issue of noise, litter, odour, pest, leachate, and methane gas issues. At the same time, the very land used for disposal destroys natural habitat and severely limits the use of the land for many generations – or longer! Alberta's Waste Not goal is to decrease the amount of material sent to landfills to 500 kg/capita by the year 2010 (It is currently 800 kg/capita). You can contribute by reducing your garbage by one third.



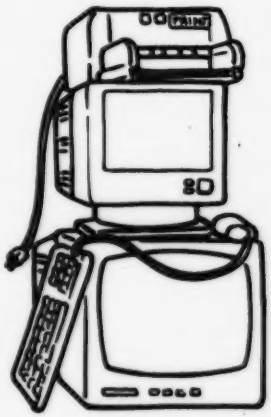
WASTE AND LANDFILLS

We often do not see the impact of the *types* of wastes we generate. Landfills are designed to take certain kinds of wastes. A few are specifically designed to contain hazardous waste materials, **but most are not**. If hazardous materials are disposed of in a landfill not designed for that purpose, the material can eventually seep through the soil, contaminating it and the groundwater. Some surprisingly common household materials, such as cleaning products, solvents, and pesticides can introduce hazardous or toxic substances into the environment. For this reason, Alberta's hazardous wastes are collected through various programs for proper treatment and/or disposal at the Swan Hills Treatment Centre and kept out of landfills and sewers.

At a 1-day round-up in 2004, Calgary collected and recycled 313,000 kg of e-waste thereby keeping potentially hazardous material out of landfills.

POLLUTION PREVENTION

Pollution prevention, also known as P2, is a term that describes using processes, practices, materials, substances or energy that avoid or minimize the creation of pollutants and waste, and reduce the overall risk to human health or the environment. Pollution prevention applies to many different processes in the world today, from resource extraction and manufacturing to transportation and water treatment. For the individual, pollution prevention means making choices every day that help reduce wasteful practices in order to preserve water, energy, air, and land resources.



Water Wise

Water is a resource that is so conveniently provided to us that we often take it for granted. Generally, every drop we consume in turn needs energy and resources to keep it flowing and safe for our use. Avoiding excess water use in the first place reduces the environmental impact through a reduced need to manage it.

Water Tips

- Turn off taps when brushing teeth
- Run fully loaded dishwashers
- Use rain barrels for plant watering
- Use low flow shower heads

Energy Sense

From the food we eat, to the car we drive, energy use abounds. Every item we have in our home, including the home itself, takes energy to produce and energy to maintain. Purchasing and operating for better energy efficiency in our day-to-day lives can have a positive impact on the environment.

Recycling an aluminum can takes only five per cent of the energy it takes to manufacture it from raw material.

Energy-Saving Tips

- Turn off lights
- Use energy-saving light bulbs
- Lower the thermostat
- Seal air leaks around windows

Breathe Easier

We generate many different kinds of indoor and outdoor air pollutants. Wood smoke, tobacco smoke, combustion gases from cars, boats, lawnmowers and appliances, particulates from dusts and sprays, and vapours from glues, paints, furniture and flooring – can all affect air quality.

Become familiar with how your own activities might impact the environment. Every time you watch television, start your car, turn up the thermostat, cook your food or enjoy a fire, you are using valuable resources that will ultimately end up as waste being disposed of in our air, water and land. Although it may not seem like much at the time, it all adds up and can lead to serious consequences. The health of our environment depends on reducing wasteful practices and conserving resources.

CARDBOARD
BOXBOARD
LOW GRADE
PAPER

reduce, reuse and recycle

The 3Rs – reduce, reuse and recycle – are the golden rules of responsible waste management. They form a hierarchy of actions that guide us towards avoiding disposal in order to prolong the life of our landfills. **Reduce** by adopting practices that eliminate waste in the first place. **Reuse** materials again and again in their original form. **Recycle** items that are collected through your community's recycling programs if they cannot be reused. These will be reprocessed or remanufactured into other useful products.

When the 3Rs have been exhausted and disposal is unavoidable, use the proper method.

- Double-bag messy items, like kitty litter and pet feces, vacuum cleaner bags, ashes and sawdust.
- Put sharp items like broken glass, needles or razor blades in puncture-proof containers before disposing.
- Keep the bags, cans or bundles lightweight, safe and manageable for collectors.
- Take potentially hazardous waste materials (see 'Potential Household Hazardous Wastes' on page 23) to a round-up or permanent drop-off facility for proper disposal – they do not belong in a landfill.

Stay mindful of the processes that are in place to help curb our waste habits. It takes only a few extra minutes to separate reusable items, recyclables, compostables, and hazardous wastes from the household garbage. Use this booklet as a guide to help you take care of the only planet we have!

AN OUNCE OF PREVENTION – REDUCE

When we dispose of something, we are also essentially throwing away the energy, raw materials, emissions, water, and hard-earned dollars that went into making the once-useful item in the first place.

You can reduce the amount of solid waste you generate by shopping wisely and by ensuring purchases last as long as possible. Consider purchases carefully – perhaps you can rent, borrow, or buy second-hand instead. Consider not only the item, but how much you need it, how much of the purchase will be discarded (especially in the form of packaging), and whether or not it can be reused or recycled in the future.

CHOOSE TO REUSE

If materials or products are still useful but you no longer need them, it makes sense to reuse them by giving them away or reselling them to someone else. Consider having a garage sale. Consignment shops accept gently used clothing and accessories and will provide you with a percentage of the selling price. Many charitable groups accept toys, bicycles, appliances, and other household items. Some even specialize in building materials or sporting goods.

Look for creative ways to reuse household items. The handles of broken hockey sticks can make sturdy garden stakes. Beads, feathers, and even old greeting cards find new life in handcrafted items. Margarine tubs or coffee cans make great storage containers. Use your imagination!

Every time we reuse an item, it not only delays or eliminates disposal, it also reduces the need to use energy and resources to manufacture a new item in its place.

RECYCLE, RECYCLE, RECYCLE

There are numerous recycling programs in place throughout Alberta. These programs vary from one municipality to the next, depending on the local availability of markets for the materials being collected. Alberta's Recycle Info Line, in operation since 1991, can help you identify the programs and materials collected in your municipality. Call 1-800-463-6326.

Materials collected through municipal recycling programs generally include paper, newsprint, cardboard, glass, metals, and plastics (primarily #1, #2, and #4 plastics which include milk jugs, plastic bottles, plastic bags and oil containers), or a combination/variation of these materials. Familiarize yourself with the items that are collected in your community's program and how they should be prepared for recycling. Make recycling a habit! If your community doesn't have a recycling program, help to organize one.

More than 7.5 million plastic milk jugs and paper cartons are sold in Alberta annually.

Worn towels and bedding can be used at animal shelters. Partially worn or outdated clothing can have a new life in the form of quilting patches or industrial rags.

Recycle your:

- *beverage containers*
- *milk containers*
- *scrap tires*
- *obsolete electronics*
- *used oil*

Programs that collect specific items or materials are also in place throughout Alberta, operating in conjunction with municipal programs or as independent systems. These programs serve to recycle or otherwise divert difficult, potentially hazardous or bulky items from going to a landfill. Beverage containers, milk containers, scrap tires, electronics, used oil materials, rechargeable batteries and expired/unused drugs are some of the materials that are collected through province-wide programs (see the chart on following pages of this booklet).

Examples of Mobius loops

By purchasing products with these symbols you are ensuring that the material can be recycled or is made from recycled material. The Mobius loop shows the three stages crucial to the success of recycling – collection, processing and then purchasing recycled products.

PROVINCE-WIDE COLLECTION PROGRAMS

WHAT?	WHY?	HOW?*
Automotive Switches	Switches in automobiles contain mercury. One gram of mercury can pollute an eight-hectare lake, rendering fish unsafe to eat for an entire year.	Automotive recyclers remove mercury switches from scrap vehicles.
Batteries • lead-acid (auto/boat) • rechargeable	Rechargeable and lead-acid batteries are responsible for between 50% and 70% of all heavy metals found in landfills. Heavy metals can include cadmium, mercury, copper, zinc, lead, manganese, nickel and lithium.	Bring rechargeable batteries back to participating retailers or municipalities – check www.call2recycle.org. Outlets for lead-acid batteries can be found in most communities. Non-rechargable batteries do not contain heavy metals and can safely go in the garbage unless there is a program in place such as Edmonton.
Beverage Containers • juice containers • pop cans • water bottles	Reduces litter; empty containers can be recycled into new products, and this uses less energy than making products from raw materials.	Return to one of more than 200 bottle depots throughout Alberta.

continued next page

* For program contact information, go to page 39.

WHAT?	WHY?	HOW?*
Electronics • TV's • computers • computer peripherals	Electronics contain materials such as lead, mercury, cadmium, beryllium and PVC plastics that can cause significant environmental and health risks if they end up in Alberta landfills.	Televisions, computers and computer peripherals are collected at municipal drop-off sites or through special round-ups. A fee is paid at point of purchase.
Fluorescent Light Bulbs	Fluorescent bulbs contain mercury, which is a toxic material and, if placed in landfills, can leach into the soil or groundwater systems.	Contact your municipality.
Household Hazardous Wastes (HHW) • aerosol cans containing product • paint, etc.	Removes unused, potentially hazardous materials from the municipal waste stream for safe disposal.	Take to your nearest HHW collection site or HHW round-up.
Medications • expired/unused prescription drugs • over-the-counter drugs	Contain toxic/or hazardous material.	Sponsored by the pharmaceutical industry, take to any pharmacy for safe disposal.

* For program contact information, go to page 39.

WHAT?	WHY?	HOW?*
Milk Containers	Milk containers do not break down in landfills; bulky in landfills.	Collection is sponsored by the dairy industry and works with municipal recycling collection programs. Check with your municipality for the nearest collection site.
Scrap Tires	Stockpiles pose environmental hazards; bulky in landfill.	Collected through tire retailers and at landfill sites (fee is paid when tire is purchased).
Used Oil Materials • used oil • filters • containers	Used oil is the largest single source of hazardous recyclable material in Western Canada and poses an environmental risk if improperly managed.	Take to a specially designed EcoCentre site, one of a network of oil collection points, or a Household Hazardous Waste location.

* For program contact information, go to page 39.

the dirt on composting

Composting is a simple recycling process and is a perfect example of pollution prevention in action because it can be carried out at home – no need for extra collection, transportation, or processing off-site. Close to one-third of the average household's waste is organic material that can be composted.

Landfills are not giant composters – it can take decades or even centuries for material to break down.

WHAT GOES IN

Fruit and vegetable scraps, coffee grounds, grass clippings, leaves, and straw can be added to your compost pile or bin. You can also add small amounts of shredded paper, coffee filters, and tea bags. Eggshells can also be included as they add nutrients to the compost but they do not break down.

Cooked foods, fats, milk products, meat scraps or bones should **NOT** go into the backyard compost bin, as these will create odours and attract pests.

To compost, all you do is:

- mix ½ nitrogen-rich materials ("green" material like fresh vegetable matter, grass clippings) with
- ½ carbon-rich materials ("brown" material like dried leaves, shredded paper, straw),
- supply enough moisture (the contents of the composter should be moist like a wrung-out sponge),
- air (lift/turn it) and let natural organisms do their job.

You can speed up the process by adding a shovelful of soil, which contains tiny organisms that break down the material.

Humus is the dark or black carbon-rich, relatively stable residue in soil resulting from the decomposition of organic matter.

Compost results from the controlled process of decomposing organic material under oxygen-rich conditions.

WHAT COMES OUT

Your reward is a nutrient-rich humus-like material that you can add to soil and plants anywhere in your yard.

BUILD YOUR OWN COMPOSTER

A compost pile can be as simple as a shallow hole at one end of the garden into which kitchen and garden wastes are added, or you can buy or build a compost bin.

Check out the 'Waste Reduction Tips' section of this booklet on page 37 to see additional tips for reducing lawn and garden waste.

plastic bin composter

wooden enclosure composter

wire mesh composter

Organics eventually decompose in landfills and produce methane which is a potent greenhouse gas. In Canada, landfills produce 3 to 5 per cent of our greenhouse gas emissions.

BLEACH
DRAIN
CLEANER

household hazardous waste

Many common household products contain hazardous chemicals. Once released into the environment, these substances may pose a serious threat to living organisms. Small quantities of hazardous substances can accumulate over time to reach dangerous levels and contaminate the air, water, and/or soil. Others can have a more immediate and devastating effect, such as poisoning.

Pesticides, fertilizers and other products can wash off lawns and gardens into storm drains and streams, polluting water. Solvents can escape to the atmosphere from the normal use of cleaners, paints and aerosol sprays, as well as from disposal or accidental spills. These substances not only pollute the air but they can also return to earth as precipitation, further polluting water and soil.

Chemicals from hazardous wastes buried in unsecured landfills can leach out and move through the soil, eventually entering groundwater. From here, contaminants can spread to wells or surface water, making it unsafe to drink.

This doesn't necessarily mean that we should stop using products that are an integral part of our daily lives – some of them are vital to our very existence. What it does mean is that we must understand the nature of the hazardous materials we use around the home, learn to use them wisely (reduce, reuse, recycle), and dispose of them carefully.

WORKING WITH HOUSEHOLD HAZARDOUS WASTE

Follow these basic guidelines on the proper use of potentially hazardous materials.

- Read and follow all directions carefully;
- Store materials securely in a well-ventilated area in original containers;
- Use only for the intended purpose as it is risky to improvise;
- Give products time to work (e.g. cleaners time to soak or pesticides time to react).

KNOW YOUR HOUSEHOLD HAZARDOUS WASTE SYMBOLS

The hazard potential of products can be identified by the following product hazard symbols:

Flammable – can burn easily (e.g., paint solvents or degreasers)

Corrosive – can eat away at surfaces, including skin (e.g., acids, rust removers, alkaline cleaning fluids, battery acid)

Reactive/Explosive – can react violently when mixed with other agents, or when placed under heat or pressure (e.g., bleaches, aerosols)

Toxic/Poison – can poison or damage living organisms (e.g., materials containing lead, mercury, cadmium or other heavy metals, pesticides, antifreeze)

Buy products only in quantities that you need. If you can't use up all of a potentially hazardous product, give it to someone else to use. Otherwise, household hazardous wastes, including glues, solvents, oil-based paints, etc., must be taken to a household hazardous waste drop-off facility or round-up for proper disposal.

WHAT TO DO WITH YOUR HOUSEHOLD HAZARDOUS WASTE (HHW)

Many Alberta municipalities have permanent, year-round facilities to safely collect HHW. The City of Calgary accepts HHW at collection drop-off locations at designated fire stations in the city. The City of Edmonton accepts HHW at its Eco Stations. Close to a dozen other communities have permanent drop-off facilities, while still others hold special collection events known as HHW Round-ups or sometimes called Toxic Round-ups.

Over 1 million litres of HHW is collected and properly disposed of annually in Alberta.

Contact Alberta's Recycle Info Line or your municipality to find out where to take your HHW. The types of items commonly accepted at a HHW facility or round-up are listed on the next page. Remember, HHW drop-off facilities and round-ups accept residential household chemicals only (not from commercial businesses or industries).

POTENTIAL HOUSEHOLD HAZARDOUS WASTES

Any household product, with one or more hazard symbols, that can't be used up (or in some cases recycled) may be taken to a HHW facility or round-up for proper disposal. **Always keep each material – never mixing – in its original labelled container and store safely out of reach of children and pets.** Examples of products may include (check labels):

In the Bathroom

- Air fresheners (aerosol)
- Drain cleaners
- Hair colouring
- Hair perm solutions
- Hair sprays (aerosol)
- Mildew removers
- Nail polish and remover
- Toilet cleaners
- Tub and tile cleaners

In the Garage

- Aerosol sprays and paints
- All-purpose solvent-based cleaners
- Ant/Wasp spray
- Auto body filler
- Automotive antifreeze
- Barbeque fire starter products
- Brake fluid
- Butane refills
- Car batteries (lead-acid)
- Car waxes and polishes
- Carbon tetrachloride
- Contact cement
- Degreasers (petroleum based)
- Fertilizers (weed and feed)
- Fungicides
- Gasoline
- Glues (solvent and water-based)
- Herbicides
- Insecticides
- Kerosene
- Lighter fluid
- Lye
- Paint thinners and strippers
- Paints (oil and water-based)
- Solvents, turpentine, varnish, lacquers
- Spa and pool chemicals
- Transmission fluid
- Used oil, oil filters, containers
- Weed killers
- Windshield washer fluid with methyl alcohol
- Wood preservatives

In the Kitchen

- Abrasive powders
- Oven cleaners

In the Laundry Room

- Ammonia
- Bleach
- Detergents
- Dry-cleaning fluids
- Fabric softeners
- Laundry stain removers
- Laundry starch
- Liquid cleansers

Other

- Acetone
- Alcohol-based lotions
- Disinfectants
- Floor wax strippers
- Furniture polishes and waxes
- Glass cleaners
- Muriatic acid
- Photographic chemicals
- Propane gas cylinders
- Rechargeable batteries
- Rubbing alcohol
- Rug and upholstery cleaners
- Rust remover
- Septic tank degreaser
- Shoe polish
- Silver and brass polish
- Spot removers
- Treated wood

Note

Ammunition and explosives should be brought to the local police or RCMP detachment for special handling.

VINEGAR
BAKING SODA
WASHING SODA

environmental alternatives

There are simple and effective alternatives for many potentially harmful chemicals used in the home. Here are a few examples:

AIR FRESHENERS

Use an open box of baking soda or a dish filled with vinegar.

ALL-PURPOSE CLEANER

½ cup (125 ml) vinegar
¼ cup (60 ml) baking soda
1 gallon (4 litres) hot water
Mix, label and use for general purpose cleaning.

CHEMICAL FERTILIZERS

Use compost, manure or fish fertilizer to enrich soil.

CHLORINE BLEACH

Use washing soda or non-chlorine bleach.
(NEVER mix chlorine bleach with ammonia – a poisonous chlorine gas forms.)

DRAIN CLEANER

¼ cup (60 ml) baking soda
½ cup (125 ml) vinegar
Pour soda, then vinegar and close drain until fizzing stops. Flush with boiling water.

HERBICIDES

Use a mulch in the garden to minimize weed growth; handpick stray weeds.

INSECTICIDES

Wash or spray plants with soapy water. For major problems, call a professional.

Detergents in general are less biodegradable, more toxic, and more expensive than soaps. Soap cleans well on its own in soft water, but will likely need a boost with washing soda for doing laundry in hard water.

LAUNDRY DETERGENT

Use biodegradable products or pure soap with washing soda.

OVEN CLEANER

Absorb fresh spills by sprinkling with table salt while still warm. When cool, brush and wipe off. Soften baked-on spills with a borax and lemon juice paste.

PAINTS AND THINNERS

Use latex or water-based paints whenever possible.

SCOURING POWDER

Make a paste of baking soda and water. Leave on a few minutes for tough stains.

TOILET BOWL CLEANER

Make a paste of borax and lemon juice. Rub the toilet bowl with the paste and leave on for a few hours. Scrub with a brush and flush.

TUB AND TILE CLEANER

Use baking powder for routine cleaning; a borax and lemon juice paste for tough soap scum.

WINDOW/GLASS CLEANER

¼ cup (60 ml) vinegar
1 cup (250 ml) water
Mix and label in a pump spray bottle.

energy
ENERGY STAR

waste reduction tips

The following tried-and-true tips will help get you started on reducing wasteful practices.

SHOPPING SOLUTIONS

- Buy recycled products. Look for the recycled symbol and support businesses that show environmental responsibility.
- Buy durable products that will last, from items such as dishcloths to efficient and durable building products. Cheaper is not always better.
- Buy products that aren't over-packaged. A similar product may be available with no packaging or in reusable containers.
- Buy in bulk or 'right size' for your use.
- Never buy more potentially hazardous materials than you need to do the job.
- Look for less toxic options.
- Bring your own reusable shopping bags.
- Tell manufacturers or retailers when you are unhappy with excess packaging.
- Choose durable materials such as hardwood, tile floors, or exchangeable carpet tiles.

Many manufacturers provide comment cards or web sites to register product warranties and/or provide feedback. Use these opportunities to express your views on excess packaging, product durability, etc.

GENERAL HOUSEKEEPING AND MAINTENANCE

- Control heating, air-conditioning and hot water temperatures to reduce your overall energy consumption. Programmable thermostats can help.
- Turn off lights and small appliances, like radios, TVs, coffee pots and computers when not in use.
- Use compact fluorescent light bulbs. They last ten times longer and are four times more efficient than regular incandescent bulbs.
- Use less toxic or non-toxic cleaning supplies (see 'Environmental Alternatives" page 27).
- Keep filters/fans/coils clean on all appliances to maximize efficiency.
- Use timers and/or sensors to limit power use on lights, vehicle block heaters, etc.
- Have an Energy Audit done of your home and see how much money you can save.
- Consider upgrading old appliances like refrigerators and furnaces to energy-efficient ones.

LED (Light Emitting Diode) holiday/accent lights are 10 times more efficient than mini lights, safer and more durable.

Website for Energy Audits is www.atcoenergysense.com

FOOD PREPARATION

- Reuse an ice cream pail to collect compostable materials. Keep it handy, incorporating materials into your compost pile or bin every few days.
- Use in-sink garbage disposals **sparingly** to avoid wasting water and overloading treatment systems.
- The kitchen often works well as a hub for collecting recyclables. Space permitting, devise a system convenient for the entire household to use.
- Rinse fruits and vegetables after peeling, not continuously under running water.
- Run the dishwasher only on full loads. Scrape food residue instead of rinsing whenever possible. Use the recommended amount of detergent.

In 2004, Alberta bottle depots processed 94,000 metric tonnes of material. There are more than 1.6 billion beverage containers (excluding milk) sold in Alberta annually.

- Use the microwave instead of a conventional oven for cooking whenever possible.
- Pack lunches in reusable containers.
- Opt for dine-in rather than take-out restaurants to avoid disposable packaging.

A reuseable juice container in a packed lunch can pay for itself in less than a week of use and create less waste.

HOME OFFICE

- Keep a box or bin handy for recyclable paper. Tear up sensitive information first.
- Use rechargeable batteries. When they lose their ability to charge, recycle them properly.
- Bring non-working computers and televisions to an "e-roundup" or a collection centre near you. Donate working equipment to an appropriate charity.
- Recycle printer/toner cartridges where services exist.
- Consider electronic banking and bill payment options to reduce paper waste.

From households alone, more than 190,000 televisions and 90,000 desktop computers will be discarded in Alberta over the next year. This material can be recycled through the Electronics Recycling Program.

HEALTH AND HYGIENE

- Turn off the tap (except to rinse) when brushing teeth or shaving.
- Showers generally use less water than baths.
- Bring all expired drugs to your local pharmacy for proper disposal (remember to keep all drugs well out of reach of children). Never rinse medicine down the drain or flush down the toilet.
- Choose solids or pump sprays over aerosols.
- Consider using a diaper service or cloth diapers to reduce the use of disposables.
- Use a rechargeable razor, or razors with replaceable blades instead of disposables.

WATER AND LAUNDRY

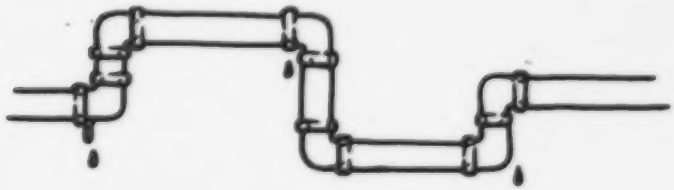
- Wait for full laundry loads. When you can't wait, use the appropriate water levels and settings.
- Consider upgrading to energy efficient front-loading washing machines.
- Follow manufacturers directions for using detergents, additives or spot removers.
- Consider high efficiency washers and dryers when it comes time to replace.
- Fully or partially air dry heavy or bulky laundry items, like jeans, sweatshirts and towels.
- Install a clothesline to reduce dependance on a dryer.

Participate in Calgary's Residential Toilet Replacement Program www.calgary.ca or check with your municipality.

HOME IMPROVEMENT

- Fix leaks and drips in toilets and faucets promptly.
- Install flow restrictors in showerheads and faucets.
- Consider retrofitting existing toilets with approved water-reduction devices. Install low-flow toilets when it comes time to replace.
- Weatherize and properly ventilate your home to help maintain comfort and health.
- Use low VOC (volatile organic compound) water-based paints, stains, sealants and adhesives.

Request "About Your House: Home Maintenance Schedule" at www.cmhc.ca



- Look for energy rating guides when buying new appliances. The EnerGuide and Energy Star labels help consumers choose for efficiency.
- Select contractors who have a proven track record for environmental responsibility.
- Inform yourself on the environmental options for "big-ticket items" that have a long-term impact, such as a new house or a car.
- Always check the energy rating of new appliances.
- Use CMHC Flex Housing concepts for homes that adapt to your current needs and do not require renovation.

HOBBIES AND LEISURE

- Share hobby materials, especially toxic ones, with another enthusiast to reduce potential waste.
- Keep potential craft items for reuse yourself, or check with a local seniors club, hospital, school or daycare to donate.
- Borrow books, videos and games instead of buying.
- Use your library instead of purchasing new books.
- Donate used items, such as toys, games and sporting goods, to charity.
- Try recreational activities that don't require engine power – and save a trip to the gym!
- Walk, bike or take transit to reduce emissions.
- Take action on climate change, find out what you can do at www.climatechangecentral.com.

The Energy Star name and symbols are registered trademarks of the U.S. Environmental Protection Agency, indentifying products that meet or exceed premium levels of energy efficiency. Canada's EnerGuide Program has been providing comparative information on the energy efficiency of household appliances for many years. An Energy Star symbol on an EnerGuide label means the product is one of the most efficient available.

AUTOMOTIVE

- Keep your car well tuned, paying special attention to correct tire pressure.
- There is no need to idle a car's engine more than one minute before driving, even in cold weather.
- Plan trips to maximize the use of your vehicle. Better still, walk, bike or take the bus when you can.
- Avoid hard accelerations and heavy braking when driving. Reduce drag by removing unnecessary accessories, such as roof racks or boxes.
- For the do-it-yourselfer, recycle used lead-acid car batteries and tires. Recycle used oil, filters, and containers.
- Keep hazardous materials, like antifreeze, safely stored away from children and animals.
- Check the Energuide and Transport Canada ratings when looking for a new vehicle. You could save thousands of $s.

BURNING ISSUES

- Woodstove or fireplace fires should burn hot, using only clean, split and well-seasoned wood. Wet, green or treated/manufactured wood should never be burned. Check out www.burnitsmart.org for more information.
- Ensure that your fire is getting enough air so it will burn hotter and cleaner, reducing emissions (smoke) and the potential for creosote build-up.
- Never burn household garbage in a woodstove, fireplace, burn barrel or pit.
- Choose high-efficiency EPA/CSA approved wood-burning appliances designed to burn better, safer, and with less smoke.
- Always check local regulations regarding fire safety.

LAWN AND GARDEN

- Start a compost bin and use it year-round.
- Consider renting a chipper when trimming shrubs and trees. Use the chips for mulch.
- Practice grasscycling. Leave clippings on the lawn to reduce waste and retain moisture.
- Try natural landscaping by replacing high-maintenance lawns with native and low water plant species.
- Landscape for windbreaks, shade and natural pest controllers like birds and ladybugs.
- Enrich garden soil or top dress lawns with finished compost.
- Only use pesticides (herbicides, insecticides, fungicides) when absolutely necessary.
- Maximize rainwater by directing flow from downspouts, etc. to areas that need it most.
- Don't water outside on windy days or in the hot sun.
- Watering one hour per week, early in the morning, is usually sufficient for proper lawn maintenance.
- Use a broom instead of a hose to clean patios, sidewalks, or driveways.

OTHER IDEAS

Use this space to write additional tips that will work for you. Revisit this booklet from time to time and make note of your progress. Share this booklet with a friend.

where to get more information

To help you follow up on some of the ideas in this booklet, the following resources are just a click or phone call away.

Alberta's Recycle Info Line
1-800-463-6326

Alberta Beverage Container
Recycling Corporation
(403) 264-0170
www.abcrc.com

Alberta Environment –
Information Centre/Publications
(780) 427-2700
www.environment.gov.ab.ca/contact
www.environment.gov.ab.ca/info

Alberta Environment –
Pollution Prevention
and Conservation
(780) 644-4950
www.environment.gov.ab.ca/waste

Alberta Plastics
Recycling Association
(780) 939-2386
www.plasticsrecycling.ab.ca

Alberta Recycling
Management Authority
1-888-999-8762
www.albertarecycling.ca

Alberta Used Oil
Management Association
1-888-922-2298
www.usedoilrecycling.com

Beverage Container
Management Board
1-888-424-7671
www.bcmb.ab.ca

Built Green Alberta
Visit their website for locations
and phone numbers
www.builtgreenalberta.com

Burn-It-Smart Program
www.burnitsmart.org

Canadian Centre
for Pollution Prevention
1-800-667-9790
www.c2p2online.com

Canada Mortgage
and Housing Corporation
1-800-668-2642
www.cmhc.ca

City of Calgary
(403) 268-2489
www.calgary.ca

City of Edmonton –
Waste Hotline
(780) 496-5678
www.edmonton.ca

Climate Change Central
1-866-809-2700
www.climatechangecentral.com

Composting Council of Canada
1-877-571-4769
www.compost.org

Environment Canada
1-800-668-6767
www.ec.gc.ca

Milk Container Recycling Program
1-877-414-5847
www.milkcontainerrecycling.com

Natural Resources Canada –
Office of Energy Efficiency
1-800-387-2000
www.oee.nrcan.gc.ca

Rechargeable Battery Recycling
Corporation
1-877-273-2925
www.call2recycle.org

Recycling Council of Alberta
(403) 843-6563
www.recycle.ab.ca

Alberta Environment
Tel: 780.427 2700
www.environment.gov.ab.ca/contact

Canada Mortgage and Housing Corporation
Tel: 1-800-668-2642
www.cmhc.ca

City of Calgary
Tel: (403) 268-2489
www.calgary.ca

Recycling Council of Alberta
Tel: (403) 843-6563
www.recycle.ab.ca

This booklet is printed on chlorine-free paper made from 100 per cent post-consumer fibre. In choosing this paper, we saved 33,291 litres of water, conserved 2,714 kilograms of wood and diverted 423 kilograms of waste from Alberta landfills.

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